

NOVA

Dependable Gas Analysis Solutions



335 SERIES PORTABLE PROCESS HYDROGEN ANALYZER

APPLICATIONS

For analysis of hydrogen (H_2) in a binary gas mixture in process gases such as H_2 in air, H_2 in nitrogen (N_2), H_2 in carbon dioxide (CO_2), H_2 in argon (Ar), H_2 in oxygen (O_2), etc.

FEATURES

- Rugged design that is easy to operate
- Fast warm up and response
- Long life thermal conductivity cell that provides accurate and stable readings
- Digital meter readout with backlight
- Modular layout that is easy to maintain
- Rechargeable 'gel cell' battery operated
- Built-in sample pump or flow regulator
- Weatherproof (WP) cabinet with clear Lexan cover

OPTIONS

- Recorder outputs of 0-1 V or 4-20 mA
- Sample pre-cooler for hot samples
- Condensate removal for wet applications
- Suitcase (K) style cabinet available
- AC only power operation
- H_2 alarm with LED
- Detachable/portable data logger

CALIBRATION

- Ambient air for zero
- Gas cylinder of known H_2 for span



Weatherproof (WP) Enclosure



Suitcase (K) Enclosure

NOVA ANALYTICAL SYSTEMS

www.nova-gas.com

DESCRIPTION

The Nova 335 Portable Analyzer has been designed for the detection of hydrogen (H₂) in a binary (two gas) mixture such as H₂ in N₂. However, it can be used in some other applications with several background gases present. Consult Nova on these applications.

The thermal conductivity (T/C) cell provides a fast and accurate measurement of H₂. It has an expected life of over 10 years unless contaminated.

In operation, a built-in sample pump draws in the gas sample through the sample tube, filter, and flow meter and then on to the T/C cell. The detected H₂ is displayed on an LCD digital meter which has a switchable back-light for use in dark areas.

A rechargeable 'gel cell' battery provides enough power for approximately 8 hours of continuous operation and the analyzer can be used while it is being recharged. A red LED tells when to recharge and a green LED verifies that it is receiving recharging power. The recharger is included.

SPECIFICATIONS

Nova reserves the right to specification changes which may occur with advances in design without prior notice.

| Description | |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Method of Detection: | Temperature compensated thermal conductivity (T/C) cell |
| Ranges: | 0-100.0% H ₂ in a binary gas mixture |
| Resolution: | 0.1% of H ₂ |
| Accuracy and Repeatability: | ± 2% of full scale |
| Drift: | ± 1% of full scale max. per day (after calibration) |
| Response Time (T-90): | 10-15 seconds to 90% step change - not including sample transport time |
| Ambient Temperature Range: | 55° to 120°F (12° to 50°C) |
| Linearity: | ± 2% of F.S. |
| Size and Weight: | WP style - approx. 10" L x 7½" W x 6½" H @ 8 lbs (25.5 x 19 x 16.5 cm @ 3.6 kg) K style approx. 9½" L x 7" W x 6½" H @ 8 lbs (24 x 17 x 18 cm @ 3.6 kg) |
| Power: | 115VAC 60Hz for recharging (220VAC 50Hz available) |
| Output Options: | 4-20 mA or 0-1 VDC |
| Alarms: | H ₂ alarm with LED (optional) |

UNIQUE APPLICATIONS

The Nova T/C cell will respond in the presence of many gases and may need to be compensated either directly in the analyzer or in the calibration gas. Consult Nova on these types of applications.

All Nova analyzers are built using proven technologies and techniques. If this product does not suit your application, please contact Nova at 1-800-295-3771. In many cases, we are able to build an analyzer specific to your needs.



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